

Title (en)

METHOD AND RELATED SYSTEM FOR ESTIMATING THE INTERNATIONAL ROUGHNESS INDEX OF A ROAD SEGMENT

Title (de)

VERFAHREN UND SYSTEM ZUR SCHÄTZUNG DES INTERNATIONALEN RAUHEITSINDEX EINES STRASSESEGMENTS

Title (fr)

PROCÉDÉ ET SYSTÈME ASSOCIÉ POUR ESTIMER L'INDICE DE RUGOSITÉ INTERNATIONAL D'UN TRONÇON DE ROUTE

Publication

EP 4330092 A1 20240306 (EN)

Application

EP 22725496 A 20220426

Priority

- IT 202100010496 A 20210426
- EP 2022061044 W 20220426

Abstract (en)

[origin: WO2022229180A1] The invention concerns a method for estimating an International Roughness Index (IRI) of a road or road segment, comprising a preliminary step (1) and an International Roughness Index estimation step (10). The preliminary step (1) comprises collecting (2) values of vehicle tire damping and stiffness coefficients (Ct, Kt) and collecting (3) vehicle vertical acceleration values (Azvehicle) measured on vehicles driven at a constant speed along road segments to which known international roughness index values or known road profiles (profiler) are associated, as well as vehicle geo-referencing data and speed data indicative of the given constant speed associated with the measured vertical acceleration values (Azvehicle).

IPC 8 full level

B60T 8/172 (2006.01); **B60W 40/06** (2012.01)

CPC (source: EP US)

B60T 8/172 (2013.01 - EP); **B60W 40/06** (2013.01 - EP US); **G06F 17/17** (2013.01 - US); **B60T 2210/14** (2013.01 - EP); **B60W 2510/222** (2013.01 - US); **B60W 2510/225** (2013.01 - US); **B60W 2552/35** (2020.02 - US); **B60W 2554/4042** (2020.02 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2022229180 A1 20221103; CN 117203105 A 20231208; EP 4330092 A1 20240306; IT 202100010496 A1 20221026; JP 2024518322 A 20240501; US 2024208511 A1 20240627

DOCDB simple family (application)

EP 2022061044 W 20220426; CN 202280031050 A 20220426; EP 22725496 A 20220426; IT 202100010496 A 20210426; JP 2023565570 A 20220426; US 202218288398 A 20220426